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SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM
EPA CONTRACT EP-W-05-042

21 August 2013
20114-081-998-0850-49
DC No. A-6835

Ms. Martha Bosworth
U.S. EPA Region I - New England
Emergency Planning & Response Branch
5 Post Office Square, Suite 100
Mail Code OSRR07-2
Boston, Massachusetts 02109-3912

SDMS DocID 584980

Subject: Case No. 43392; SDG No. A4B59
ChemTech Consulting Group (Chem)
Jard Company Inc
Bennington, Vermont
AROCLOR: 18/Soil/A4B59-A4B71, A4B73-A4B76, A4B79
(Field Duplicates A4B59/A4B60)
4/Aqueous Equipment Blanks/A4B12-A4B15
2/Soil PEs/A4B77, A4B78
CERCLIS No. VTD048141741
TDD No. 12-10-0008, Task No. 0850-49

Dear Ms. Bosworth:

A Tier II validation was performed on the organic analytical data for 18 soil samples and four aqueous equipment (rinsate) blanks collected by WESTON START at the Jard Company Inc site in Bennington, Vermont, and for two PE samples obtained from EPA Region I. *Italicized sample ID numbers in the list above are associated with samples in this SDG, but reported in another SDG.* The samples were analyzed under CLP following SOW SOM01.2 as low/medium level for Aroclor compounds. The data were evaluated as Tier II level in accordance with the "Region I EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses" dated December 1996, and the USEPA CLP National Functional Guidelines for Superfund Organic Methods, and were based on the following parameters:

	•	Overall Evaluation of Data and Potential Usability Issues.
*	•	Data Completeness.
*	•	Preservation and Technical Holding Times.
*	•	GC/MS and GC/ECD Instrument Performance Checks.
*	•	IC and CC.
*	•	Blanks.
*	•	Surrogate Compounds.
NA	•	IS.
*	•	MS/MSD.
	•	Field Duplicates.
NA	•	Sensitivity Check (MDL Study or LFB).

*	•	PE Samples/Accuracy Check.
*	•	Target Compound Identification.
*	•	Sample Quantitation and Reported Quantitation Limits.
NA	•	TICs.
*	•	SVOC and PEST/PCB Cleanup.
*	•	System Performance.
NA	•	SEDD/ADR.

* = No qualifications will be applied based on this parameter.

Table I summarizes overall evaluation of the data with reference to the DQO and potential usability issues. Qualified data are summarized in Data Summary Table 1.

Overall Evaluation of Data and Potential Usability Issues

See Table I for overall evaluation of data and potential usability issues.

Field Duplicates

The following compounds failed to meet the RPD criteria (<50%) for field duplicate precision in soil field duplicate samples A4B59 and A4B60:

Compound	A4B59 Concentration (µg/kg)	A4B60 Concentration (µg/kg)	RPD	Action Pos/ND
Aroclor-1260	210	390	60%	J Pos

Non-compliant compounds in field duplicate samples A4B59 and A4B60 will be qualified as indicated above.

PE Samples/Accuracy Check

The criteria used by START for qualification of sample data based on the PE sample results are as follows:

PE Score	Action	
	Non-Detects	Positive Results
In Window	Accept	Accept
Warning Low/High	Accept	Accept
Action Low	Reject (R)	Estimate (J)
Action High	Accept	Estimate (J)
TCL Misses	Reject (R)	Varies

PE Score	Action	
	Non-Detects	Positive Results
TCL Contaminants	Accept	Varies
TIC Misses	Varies	Varies
TIC Contaminants	Varies	Varies

All non-compliant PE scores were investigated by checking raw data, calculations, calibrations, possible matrix interferences, and blank contamination. Unless otherwise noted, all results reported by the laboratory were found to be correct, based on the data generated by the laboratory.

The laboratory properly identified and quantified the soil Aroclor-1248 PE sample (A4B77, PE No. AS1430). No qualifications were applied.

The laboratory properly identified and quantified the soil Aroclor-1242 PE sample (A4B78, PE No. ASX0180). No qualifications were applied.

Please contact the undersigned at (978) 552-2100 if you have any questions or need further information.

Very truly yours,

WESTON SOLUTIONS, INC.
Region I START

William W. Mahany
Principal Project Scientist

John Burton
Lead Chemist

email cc: Jennifer Feranda (CLP PO - Region II) - DV Letter w/Data Tables, and ORDA Form only – Feranda.jennifer@epa.gov

Attachments:
Table I: Overall Evaluation of Soil Data
Data Summary Key
Acronym List
Data Summary Table 1
DV Worksheets
PE Sample Score Reports (included in DV worksheets)
Field Sampling Notes (including a copy of sampler's COC Records)
CSF Audit (DC-2 Form) - Evidence Audit Photocopy (Including CSF Receipt/Transfer Form)
DQO Summary Form

TABLE I

JARD COMPANY INC
Case No. 43392; SDG No. A4B59

Overall Evaluation of Soil Data

AROCLORs					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability**	Potential Usability Issues
		Analytical Error	Sampling Error*		
1. To obtain sufficient data from surface and subsurface soil samples collected at the Jard Company site for PCB (Aroclor) analysis, to document potential source areas located on and off the property, and to document contamination in the soil and sediment associated with source areas located on the property.	*Analytical Method:* Yes, SOM01.2 *Sampling Method:* Yes, Hand Augers, and Stainless Steel Scoops.	Refer to qualifications in attached Data Summary Table 1. 1	Refer to qualifications in attached Data Summary Table 1.		1. Field Duplicate precision exceeded the soil RPD criteria for samples A4B59 and A4B60. Positive results for Aroclor 1260 were estimated (J).

* The evaluation of "sampling error" cannot be completely assessed in data validation.

** Sampling variability is not assessed in data validation.

DATA SUMMARY KEY
ORGANIC DATA VALIDATION

J	=	The associated numerical value is an estimated quantity.
R	=	The data are unusable (compound may or may not be present). Resampling and reanalysis are necessary for verification. The R replaces the numerical value or SQL.
U	=	The compound was analyzed for, but not detected. The associated numerical value is the SQL or the adjusted SQL.
UJ	=	The compound was analyzed for, but not detected. The associated numerical value is the estimated SQL.
EB	=	The compound was identified in an aqueous EB that was used to assess field contamination associated with soil/sediment samples.
TB	=	The compound was identified in an aqueous TB that was used to assess field contamination associated with soil/sediment samples.
BB	=	The compound was identified in an aqueous BB that was used to assess field contamination associated with soil/sediment samples.

ACRONYM LIST
ORGANIC DATA VALIDATION

AQ	aqueous
AQ FB	aqueous field blank
BB	Bottle Blank
B/N	base/neutral compound
°C	degrees Celsius
CC	Continuing Calibration
CCV	Continuing Calibration Verification
CLP	Contract Laboratory Program
COC	Chain-of-Custody record
COR	Contracting Officer Representative
CRQL	Contract Required Quantitation Limit
CSF	Complete SDG File
%D	percent difference
DAS	Delivery of Analytical Services
DMC	Deuterated Monitoring Compound
DQO	Data Quality Objective
DV	Data Validation
DW	drinking water
EB	Equipment Blank
EPA	Environmental Protection Agency
GC/ECD	Gas Chromatograph/Electron Capture Detector
GC/MS	Gas Chromatograph/Mass Spectrometry
GW	groundwater
IC	Initial Calibration
IS	Internal Standard
kg	kilogram
L	liter
LCS	Laboratory Control Sample
LFB	Laboratory Fortified Blank
MDL	Method Detection Limit
µg	microgram
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NA	Not Applicable
ND	non-detected result
ng	nanogram
NERL	New England Regional Laboratory
OSC	On-Scene Coordinator
ORDA	Organic Regional Data Assessment
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl compound
PEST/PCB	pesticide/polychlorinated biphenyl compound
PE	Performance Evaluation
Pos	positive result
QC	Quality Control
%R	percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RSD	Relative Standard Deviation
SDG	Sample Delivery Group
SOW	Statement of Work
SQL	Sample Quantitation Limit
S/S	soil/sediment
S/S (m)	soil/sediment medium level
START	Superfund Technical Assessment and Response Team
SVOC	semivolatile organic compound
SW	surface water
TB	Trip Blank
TCL	Target Compound List
TDD	Technical Direction Document
TIC	Tentatively Identified Compound
TR	Traffic Report
VOC	volatile organic compound
WESTON	Weston Solutions, Inc.

SITE: JARD COMPANY INC
CASE: 43392 SDG: A4B59
LABORATORY: CHEMTECH
CONSULTING GROUP

DATA SUMMARY TABLE 1
AROCLOR IN SOIL ANALYSIS
µg/Kg

		SAMPLE NUMBER	A4B59	A4B60	A4B61	A4B62	A4B63	A4B64	A4B65
		SAMPLE LOCATION	P009-SS-11	P009-SS-20	P007-SS-05	P009-SS-03	P011-SS-07	P011-SS-09	P011-SS-09
		STATION LOCATION	JCS-268	JCS-574	JCS-283	JCS-243	JCS-171	JCS-177	JCS-178
		LABORATORY NUMBER	E1926-01	E1926-02	E1926-17	E1926-03	E1926-20	E1926-21	E1926-22
COMPOUND	MDL	CRQL							
Aroclor-1016	2.6	33	61 U	57 U	47 U	42 U	40 U	41 U	39 U
Aroclor-1221	7.8	33	61 U	57 U	47 U	42 U	40 U	41 U	39 U
Aroclor-1232	1.3	33	61 U	57 U	47 U	42 U	40 U	41 U	39 U
Aroclor-1242	6.2	33	61 U	57 U	47 U	42 U	40 U	41 U	39 U
Aroclor-1248	2.7	33	61 U	57 U	47 U	42 U	40 U	41 U	39 U
Aroclor-1254	3.2	33	61 U	57 U	47 U	42 U	40 U	41 U	39 U
Aroclor-1260	3.2	33	210 J	390 J	47 U	42 U	40 U	41 U	39 U
Aroclor-1262	14	33	61 U	57 U	47 U	42 U	40 U	41 U	39 U
Aroclor-1268	6.6	33	61 U	57 U	47 U	42 U	40 U	41 U	39 U
		DILUTION FACTOR	1.0	1.0	1.0	1.0	1.0	1.0	1.0
		DATE SAMPLED	4/10/2013	4/10/2013	4/11/2013	4/10/2013	4/9/2013	4/9/2013	4/9/2013
		DATE EXTRACTED	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013
		DATE ANALYZED	4/26/2013	4/26/2013	4/26/2013	4/26/2013	4/26/2013	4/26/2013	4/26/2013
		SAMPLE WEIGHT (GRAMS)	30.1	30.1	30	30	30.1	30.1	30
		% SOLID	53.5	58.0	69.9	78.0	82.2	81.1	83.6

NOTES: µg/Kg = micrograms per Kilogram
All results are reported on a Dry Weight Basis.
CRQL = Contract Required Quantitation Limit
MDL = Method Detection Limit
U = Value is Non-Detected.
UJ = Value is Non-Detected, and Detection Limit is Estimated.
J = Value is Estimated.
R = Value is Rejected.
* = Reported value is from diluted analysis.

SITE: JARD COMPANY INC
CASE: 43392 SDG: A4B59
LABORATORY: CHEMTECH CONSULTING GROUP

DATA SUMMARY TABLE 1
AROCLOR IN SOIL ANALYSIS
µg/Kg

		SAMPLE NUMBER	A4B66	A4B67	A4B68	A4B69	A4B70	A4B71	A4B73
		SAMPLE LOCATION	P007-SS-01	P007-SS-01	P007-SS-09	P006-SS-04	P006-SS-04	P006-SS-09	P003-SS-01
		STATION LOCATION	JCS-269	JCS-271	JCS-294	JCS-308	JCS-309	JCS-323	JCS-390
		LABORATORY NUMBER	E1926-04	E1926-05	E1926-06	E1926-07	E1926-08	E1926-09	E1926-10
COMPOUND	MDL	CRQL							
Aroclor-1016	2.6	33	45 U	44 U	41 U	52 U	46 U	46 U	42 U
Aroclor-1221	7.8	33	45 U	44 U	41 U	52 U	46 U	46 U	42 U
Aroclor-1232	1.3	33	45 U	44 U	41 U	52 U	46 U	46 U	42 U
Aroclor-1242	6.2	33	45 U	44 U	41 U	52 U	46 U	46 U	42 U
Aroclor-1248	2.7	33	45 U	44 U	41 U	52 U	46 U	46 U	42 U
Aroclor-1254	3.2	33	45 U	44 U	41 U	52 U	46 U	46 U	42 U
Aroclor-1260	3.2	33	15 J	44 U	41 U	52 U	46 U	46 U	42 U
Aroclor-1262	14	33	45 U	44 U	41 U	52 U	46 U	46 U	42 U
Aroclor-1268	6.6	33	45 U	44 U	41 U	52 U	46 U	46 U	42 U
		DILUTION FACTOR	1.0	1.0	1.0	1.0	1.0	1.0	1.0
		DATE SAMPLED	4/10/2013	4/10/2013	4/10/2013	4/11/2013	4/11/2013	4/11/2013	4/12/2013
		DATE EXTRACTED	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013
		DATE ANALYZED	4/26/2013	4/26/2013	4/26/2013	4/26/2013	4/26/2013	4/26/2013	4/26/2013
		SAMPLE WEIGHT (GRAMS)	30	30	30.1	30.1	30	30	30
		% SOLID	73.2	74.3	81.3	63.6	72.1	71.2	78.1

NOTES: µg/Kg = micrograms per Kilogram
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R = Value is Rejected.
* = Reported value is from diluted analysis.

SITE: JARD COMPANY INC
CASE: 43392 SDG: A4B59
LABORATORY: CHEMTECH
CONSULTING GROUP

DATA SUMMARY TABLE 1
AROCLOR IN SOIL ANALYSIS
µg/Kg

		SAMPLE NUMBER	A4B74	A4B75	A4B76	A4B79			
		SAMPLE LOCATION	P003-SS-02	P004-SS-07	P004-SS-09	P005-SS-04			
		STATION LOCATION	JCS-393	JCS-379	JCS-384	JCS-340			
		LABORATORY NUMBER	E1926-11	E1926-12	E1926-13	E1926-16			
COMPOUND	MDL	CRQL							
Aroclor-1016	2.6	33	45 U	48 U	50 U	44 U			
Aroclor-1221	7.8	33	45 U	48 U	50 U	44 U			
Aroclor-1232	1.3	33	45 U	48 U	50 U	44 U			
Aroclor-1242	6.2	33	45 U	48 U	50 U	44 U			
Aroclor-1248	2.7	33	45 U	48 U	50 U	44 U			
Aroclor-1254	3.2	33	45 U	48 U	50 U	44 U			
Aroclor-1260	3.2	33	45 U	48 U	50 U	44 U			
Aroclor-1262	14	33	45 U	48 U	50 U	44 U			
Aroclor-1268	6.6	33	45 U	48 U	50 U	44 U			
		DILUTION FACTOR	1.0	1.0	1.0	1.0			
		DATE SAMPLED	4/12/2013	4/11/2013	4/11/2013	4/11/2013			
		DATE EXTRACTED	4/23/2013	4/23/2013	4/23/2013	4/23/2013			
		DATE ANALYZED	4/26/2013	4/26/2013	4/26/2013	4/26/2013			
		SAMPLE WEIGHT (GRAMS)	30	30.1	30	30			
		% SOLID	73.0	67.9	66.2	74.7			

NOTES: µg/Kg = micrograms per Kilogram
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